APPENDIX G: Public Comments on the 2010 Integrated Report and Louisiana Department of Environmental Quality's Response to Comments

The following table is a compilation of all comments received regarding the 2010 Integrated Report, along with LDEQ's response to those comments. Any changes made to the 2010 Integrated Report based on public comments are noted in the column entitled, "Summary of LDEQ Responses."

Commenters	Summary of Comments/Questions	Summary of LDEQ Responses
Tulane Environmental Law Clinic (TELC), on behalf of Gulf Restoration Network (GRN) and Louisiana Environmental Action Network (LEAN) Received 9/20/2010	1. TELC I: LDEQ fails to provide documentation for water bodies that have been delisted from the previous 303(d) list as required by 40 C.F.R. §130.7(b)(6). LDEQ must provide specific justification for each delisted waterbody.	1. Any changes (delistings or otherwise) in a subsegment's water quality assessment between the 2008 and 2010 Integrated Report (IR) are the result of new data or information regarding conditions of the subsegment. This is specifically stated in the Rationale on page 1, "*Changes* to the IR for 2010 are based on *new* ambient water quality data collected from 1 January 2006 through 30 September 2009." (emphasis added). Changes in *IR status* are based on changes in TMDL completion status or in some cases reevaluation of the information used to make the initial assessment. The Clean Water Act makes an explicit allowance for correction of assessments initially made with "…flaws in the original analysis that led to the water being listed in the categories in § 130.7(b)(5);" (40 CFR.§130.7(b)(6)(iv)). All changes noted in TELC attachment 3 were the result of the actions described above or errors in the TELC attachment. Most of the TELC reported delistings in attachment 3 where the result of changes in water quality condition as determined by new assessments and based on new data. Some cases were the result of changes from IRC 5 to IRC 3. These are discussed under comment 2, below. Six identified water body impairment combinations in attachment 3 had no apparent errors associated with them and, therefore, remain as first determined. In cases where EPA *requests* demonstration of "good cause for not including a water or waters on the list," LDEQ has and will provide that demonstration on a case by case basis. Detailed discussions of specific delistings are provided with subsequent TELC comments.
	2. TELC I.A.1: A comparison of the 2008 Integrated List to the 2010 List shows at least seven water body segments that had been listed as IRC 5 for nutrients in 2008, but have been reclassified as IRC 3 in 2010. LDEQ provides no rationale nor supporting documentation for these delistings.	2. The rationale for moving the noted nutrient impairments from IRC 5 to IRC 3 is stated in the publicly noticed 2010 IR Rationale in paragraph 1 on page 9. While TELC asserts that LDEQ had no justification for the reclassification, page 3 of the TELC comments includes the phrase, "…flaws in the original analysis…" This phrase is also stated in the Clean Water Act, and subsequent federal water quality regulations (40 CFR §130.7(b)(6)(iv)) which require states "…demonstrate good cause for not including a water or waters on the list. Good cause includes, but is not limited to, more recent or accurate data; more sophisticated water quality modeling; *flaws in the original analysis* that led to the water being listed in the categories in §130.7(b)(5); or changes in conditions, e.g., new control equipment, or elimination of discharges." (emphasis added) In the case of these water bodies, LDEQ determined that due to the lack of numerical criteria for nutrients, and due to the evaluative (without data) nature of the original assessments, these water body impairment combinations were flawed and, therefore, changed to IRC 3 pending creation of numerical

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		nutrient criteria or other means to make an assessment, such as support of dissolved oxygen criteria. This decision was discussed with and approved by EPA Region 6 prior to implementation in the 2010 IR
	3. TELC I.A.2: Segment LA081503 was classified as IRC 5 for dissolved oxygen on the 2008 List. LDEQ has reclassified it as IRC 4a on the 2010 List. There is no applicable TMDL. Segment 040201 was classified as IRC 5 for nitrate/nitrite and phosphorous on the 2008 List. LDEQ has reclassified it as IRC 4a on the 2010 List without an EPA-approved TMDL.	3. With regard to LA081503_00 a Load Allocation for dissolved oxygen was completed in approximately 1997. At that time a Load Allocation was considered equivalent to a TMDL for §303(d) purposes. This determination has been approved by EPA Region 6 since that time period. For LA040201_00 nitrate/nitrite and total phosphorus were reclassified from IRC 5 in the 2008 IR to IRC 3 in 2010 IR. See response to TELC comment 2, above. Dissolved oxygen remains classified as category 5 on the draft 2010 IR. As noted in the comments the TMDL for this Waterbody Impairment Combination (WIC) is pending EPA approval.
	4. TELC I.A.3: LA080802_00 is incorrectly not reported for dissolved oxygen.	4. Thank you for pointing out this error. After reviewing this WIC it was found that the dissolved oxygen criterion is still impaired for LA080802_00. This will be corrected in the final 2010 IR.
	5. TELC I.B: LDEQ's Refusal to Classify Any Waterbody Segments as Category 5 for Nitrate/Nitrite and /or Total Phosphorus Violates Federal Law and is Arbitrary and Capricious. LDEQ is wrong when it states that Louisiana does not currently have nutrient criteria. LDEQ must use narrative nutrient criteria to determine impairment.	5. LDEQ's narrative or "general" criteria for nutrients state the naturally occurring range of nitrogen-phosphorus ratios shall be maintained." Site-specific studies must be conducted to establish these ratios (ERC 33:IX.1113.B.8). Because these site-specific studies have not been conducted and because numerical criteria are not yet available, LDEQ is unable to adequately assess for nutrients. As has been noted in response to TELC comment 2, the original basis for nutrient listings were evaluative in nature and, therefore, contain "flaws in the original analysis." See also LDEQ response to TELC comment 2.
	6. TELC I.C: LDEQ Provides Insufficient Information to Determine the Adequacy of Its Monitoring. In the 2008 Integrated Report Rationale, the LDEQ included a table that listed the monitoring schedule for each of the 12 basins. The LDEQ removed this table in the 2010 List. The LDEQ should provide more detailed information in the Rationale as to which basins are monitored which years. There is a question as to whether the LDEQ used all of the available sampling results for each waterbody or whether it picked out some samples and did not use others.	6. The 2010 IR Rationale contains references to all aspects of LDEQ's water quality monitoring program. Page 3 of the Rationale states that all "sample collection, handling, and laboratory analysis must be in accordance with LDEQ Ambient Water Quality Monitoring Quality Assurance Project Plan" (QAPP). While this document is not available on the LDEQ web site it is a public record and, therefore, available upon request. The QAPP provides detailed descriptions of all aspects of data handling. It also includes references to the Standard Operating Procedures for additional detail on sample collection and handling. LDEQ's water quality monitoring site rotation process is described in detail starting on page 1 of the Rationale. This section points out that new assessments were developed for all twelve of Louisiana's basins. It also states that approximately ¼ (not ½ as stated by TELC) of the subsegments in Louisiana are sampled each year for a one-year period. This results in virtually all subsegments being sampled over the course of a four-year period. Table 1 of the 2010 Rationale, which was noted as inadequate by TELC, does not contain specific subsegments or basins to be monitored each year because under the current rotating basins approach virtually all subsegments are sampled during the four-year period. Unlike the related table from the 2008 Rationale, which contained specific basins, the 2010 Rationale update does not require specific basins because monitoring is now statewide instead of basin by basin. This statewide nature was pointed out on page 2 of the 2010 Rationale in bullet 2. For the 2010

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		Rationale table 1 was intended primarily to document the change from calendar year to water year. Regarding the number of data points used versus those collected, LDEQ uses all data that meets Quality Assurance/Quality Control (QA/QC) protocols. The lower limit of 5 samples discussed in the Rationale and TELC comment does not imply that 12 samples may have been collected but only 5 used for an assessment. LDEQ in no way chooses some data over others, except in so far as QA/QC protocols permit. Sample sizes below the expected 12 for any parameter are generally related to problems encountered during sampling or laboratory analysis.
	7. TELC I.D: LDEQ Must Provide Details on its Use of Downstream Testing to Determine Water Quality of a Water Body.	7. LDEQ has improved its description of "immediately downstream" in the final version of the IR text. To summarize here, "immediately downstream" typically means within approximately 600 yards or less. There are seven subsegments where the sample site used for the 2010 IR is within this range of the downstream subsegment boundary. In each case there are no known inputs between the boundary and the sample site. Four subsegments have sample points between 1 and 5 miles downstream from the subsegment boundary. In each case there are no reasonable alternatives to sampling at or above the downstream boundary and best professional judgment has determined that the downstream sample point is representative of the assessed subsegment. As noted in the 2008 IR response to comments, LDEQ's water quality monitoring program is designed to characterize ambient surface water quality conditions and collect data to make water quality standards attainment decisions. The state uses the most efficient monitoring design that best serves its monitoring objectives, which includes assessing water quality impacts. Location of sampling sites near the lower end of a subsegment helps to identify causes and sources of water quality impairments within subsegments and better address water quality conditions within the watershed. Occasionally sampling downstream of the subsegment boundary is necessary in instances where readily accessible sample points, typically bridge sites, are not available at or upstream of the subsegment boundary.
	8. TELC I.E: LDEQ Fails to Include Parameters for Metals for Primary Contact and Secondary Contact Recreation Water Bodies. Metals such as arsenic, chromium, cadmium, mercury, and lead can be toxic to humans and therefore should be required as a measured parameter.	8. In conducting metals assessments LDEQ considers both the fish and wildlife propagation (FWP) and the human health drinking water supply (DWS) criteria. Current metals aquatic life criteria are more protective for any incidental contact or ingestion by humans for non-drinking water sources than are metals criteria for primary and secondary contact recreation water bodies. While table 2 of the 2010 IR Rationale did not explicitly include the statement "metals" when providing the assessment rule statements for primary and secondary contact recreation, human health metals criteria were considered. The corresponding table in the final 2010 Integrated Report has been modified to include "metals" in order to clarify this issue.
	9. TELC I.F: The Rationale did not describe in detail the surface water monitoring methods that LDEQ used.	9. LDEQ's Ambient Monitoring QAPP and Standard Operating Procedures are available upon request as noted in the Rationale. The Ambient Monitoring QAPP was specifically referenced on page 1 of the IR Rationale. Standard Operating Procedures for the ambient monitoring program are referenced within the Ambient Monitoring QAPP.

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	10. TELC II: LDEQ Fails To Follow Appropriate EPA Guidance.	10. As stated in its preface, the EPA's current Consolidated Assessment and Listing Methodology (CALM) provides guidance. It does not create a legally binding requirement, but rather suggests approaches that may be used as appropriate. Detailed discussions of specific examples where EPA guidance differs from LDEQ procedures are provided below with subsequent TELC comments.
	11. TELC II.A: LDEQ fails to treat threatened water bodies as impaired.	11. Clean Water Act regulations specify inclusion in the §303(d) List of "Waters identified by the State *in its most recent section 305(b) report* as "partially meeting" or "not meeting" designated uses or as "threatened";" (CFR 130.7(5)(i)) (emphasis added) . Because LDEQ does not include the use support statement "threatened" in its §305(b) report, it is not possible to include this use support statement in its §303(d) list. See response to TELC comment 10 regarding CALM Guidance.
	12. TELC II.B: In contrast to EPA guidance, the LDEQ uses very small sample sizes in some instances to determine attainment of water quality standards.	12. Louisiana's sampling design is suitable for the project objective and the resources available to implement the sampling. The sample sizes are outlined in LDEQ's Ambient Monitoring QAPP which is approved by EPA. See response to TELC comment 10 regarding CALM Guidance.
	13. TELC II.C: TELC II.C: TELC disagrees with use of 25% assessment rule for fecal coliforms instead of 10% assessment rule recommended in EPA guidance.	13. LDEQ water quality assessments must be applied within existing water quality criteria as defined in LAC 33: IX.1113.C.5.a-d. These criteria specify fecal coliform and use of a 25% assessment rule. They have been legally promulgated by LDEQ and approved by EPA. See response to TELC comment 10 regarding CALM Guidance.
	14. TELC II.D: The LDEQ should add whole sediment toxicity tests and data interpretation of results consistent with EPA guidance to its monitoring program.	14. Contaminated sediments information as it relates to advisory water bodies impacted by sediment contamination is used for Integrated Report assessments. When sediment problems were identified the information was used to establish advisories, if necessary. Such advisory related impairments are included in the 2010 and previous Integrated Reports. See response to TELC comment 10 regarding CALM Guidance.
	15. TELC II.E: The IR Rationale does not require a biological survey to show use support as recommended by EPA guidance.	15. LDEQ is in the process of conducting biological surveys as part of its Ecoregion criteria development project; however, this project is not intended for use in assessing water bodies at this time. See response to TELC comment 10 regarding CALM Guidance.
	16. TELC II.F: EPA guidance recommends use of enterococci criteria rather than fecal coliform for assessment of primary and secondary contact recreation. Concern over designation of "this unit added for advisory tracking purposes only," with regard to LDHH Beach Monitoring Program listings.	16. LDEQ water quality assessments must be applied within existing water quality criteria as defined in LAC 33: IX.1113.C.5.a-d. These criteria specify fecal coliform. They have been legally promulgated by LDEQ and approved by EPA. See response to TELC comment 10 regarding CALM Guidance. LDEQ's criteria development unit is in consultation with EPA and other states with regard to the research on enterococci and fecal coliform concerning the suitability of each parameter. Based on that research there is still uncertainty as to the suitability of using enterococci in some waters. The designation of an advisory water body with the phrase, "this unit added for advisory tracking purposes only," does not reduce the protections applied to the water body or the expectations for TMDL development. This is evidenced by the application of IRC 5 to these water bodies. This phrase is only

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		added to differentiate water bodies so designated from water body subsegments promulgated in LAC 33:IX.1123.Table 3.
	17. TELC II.G: LDEQ's bacteria criteria for oyster production does not meet the minimum criteria set forth by the EPA. The EPA guidance recommends testing for total coliforms. LDEQ's sampling program only includes sampling for fecal coliform.	17. LDEQ water quality assessments must be applied within existing water quality criteria as defined in LAC 33: IX.1113.C.5.a-d. These criteria specify fecal coliform and the assessment rule to be used. They have been legally promulgated by LDEQ and approved by EPA. See response to TELC comment 10 regarding CALM Guidance.
	18. TELC II.H: LDEQ does not use core and supplemental water quality indicator parameters from both the CALM Guidance and the EPA-developed *Elements of a State Water Monitoring and Assessment Program.*	18. EPA's approval of LDEQ's *Quality Assurance Project Plan for the Ambient Water Quality Monitoring Network* in March 2010, as well as approval of previous revisions of the document indicates EPA approval of LDEQ's list of parameters to be sampled. Further, EPA's review and approval of previous Integrated Reports did not indicate any disagreement regarding LDEQ's chosen monitoring parameters. See response to TELC comment 10 regarding CALM Guidance.
	19. TELC II.I: LDEQ does not require risk-based tissue testing which is recommended in CALM guidance.	19. Risk-based tissue testing is conducted by LDEQ as indicated by specific suspected concerns throughout the state and as resources allow. Other water bodies, notably the Mississippi River and Calcasieu Estuary, have also been or remain the subject of risk-based tissue testing. In the case of the Calcasieu Estuary this resulted in fish consumption advisories being issued. The results of both forms of testing are evidenced by the presence of water body subsegments impaired due to fish consumption advisories on the 2010 IR. See response to TELC comment 10 regarding CALM Guidance.
	20. TELC III: LDEQ Should Include On Its §303(d) List Nearshore Waters West of the Mississippi River for Nitrate/Nitrite, Phosphorus, and Dissolved Oxygen.	20. For the 2010 IR LDEQ once again reviewed the LUMCON data and sites provided by EPA. The LUMCON site coordinates provided by TELC for its 2010 IR comments were once again projected on a map of the Louisiana coast. This review confirmed that only LUMCON transects A-D include sites within the state three-mile limit. Transects E-K plus S and T all lie outside the state three-mile limit and thus do not apply to the Louisiana Integrated Report. Data from sites along transects A-D and within the three-mile limit was used in the 2008 IR and reviewed for the 2010 IR. This resulted in the assessments described below and in the 2008 IR. Subsegments 021102 – Barataria Basin Coastal Waters; 070601 – Mississippi River Basin Coastal Waters; and 120806 – Terrebonne Basin Coastal Waters were listed for the suspected cause of "Oxygen, Dissolved" based on additional data provided for the 2008 IR (and reviewed for the 2010 IR) by USEPA Region 6. Suspected impairment will be reported as Integrated Report Category 4b, which indicates that a corrective action other than a TMDL will be used to address the suspected impairment. Analysis of SEAMAP data results in the same assessment found using the LUMCON and other datasets. The water bodies are not listed as impaired for nitrate/nitrite and phosphorus because no numerical nutrient criteria have been developed for these parameters and, therefore, no accurate assessment may

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		be made. See also LDEQ response to TELC comments 2 and 5. The reader is referred to the 2008 IR response to comments, Appendix G, for a more detailed discussion of LDEQ's coastal assessment and Integrated Report Category decision.
	21. TELC IV: LDEQ Should Include On Its §303(d) List the Mississippi and Atchafalaya Rivers for Nitrate/Nitrite and Phosphorus and Dissolved Oxygen. The unnaturally low dissolved oxygen in the nearshore waters of Louisiana is caused by the nitrogen and phosphorus flowing down the Mississippi and Atchafalaya Rivers. LDEQ should utilized narrative criteria. Though LDEQ's ambient monitoring does not show a violation of dissolved oxygen standards, given the EPA-supplied data, it would be prudent for the LDEQ to place segment 070401 in IRC5, as impaired for dissolved oxygen.	21. Louisiana's ERC does not currently contain numerical criteria for nitrate/nitrite or phosphorus; therefore, there is no numerical basis for assessing these waters for these nutrient values. LDEQ is developing nutrient criteria for Louisiana waters as part of its plan, *Developing Nutrient Criteria for Louisiana*, which can be found on the LDEQ Web site. Further, dissolved oxygen concentrations in both rivers are well above the dissolved oxygen criterion of 5.0 mg/L. Based on established assessment protocols this indicates that neither river is impaired by nutrients or DO. For more information on this process please see the 2010 IR, Part III, Chapter 2, 2010 Water Quality Assessment Procedures, Nutrient Assessment Procedures. See also LDEQ response to TELC comment 2 and 5.
	22. TELC V: Limited Public Comment Documents Provide Insufficient Information For Informed Public Comment. TELC V.A: LDEQ Fails To Provide Sufficient Information about the Criteria It Uses in Table 2 of the Rationale	22. Clean Water Act regulations state that the description of the methodology used to develop the list should be provided with the §303(d) assessment. 40 CFR §130.7(b)(6)(i). LDEQ provided its assessment methodology and detailed descriptions in table 2 of the Rationale. Further, the Rationale specifically states, "Designated uses and criteria for each water body subsegment are listed in Louisiana's ERC 33:IX.1123." See also response to TELC comment 1.
	23. TELC V.B: LDEQ's Rationale does not Provide Details about the Methods used in Collecting and Analyzing Data Relied on in Determining if a Designated Use was Impaired.	23. See LDEQ responses to TELC comments 1, 6, and 9.
	24. TELC V.C: LDEQ Fails to Provide Criteria for Regional Staff to Recommend Water Bodies To Be Listed as Unimpaired.	24. LDEQ regional staff does *not* make recommendations for water bodies to be listed as unimpaired. Decisions regarding impairment are based on the criteria and statistical methods described in the IR Rationale. Regional staff provides input regarding *suspected sources* of impairment. Based on the suspected sources an impairment may be changed from IRC 5 to IRC 3 or IRC 5RC. In the case of IRC 5RC this does not remove or otherwise delist the impairment. Rather, the priority for TMDL development is changed with the IRC designation. IRC 3 was used in instances where, in addition to possible natural conditions, the original representativeness of the data was suspect due to site location or changes in coastal wetlands.
	25. TELC V.D: LDEQ Fails To Include Its Procedure for Determining the Need or Methodology for a Use Attainability Analysis.	25. Use of IRC 5RC to suggest development of a UAA is *not* a delisting of the water body impairment. IRC 5RC is by definition on the §303(d) list. Table 3 of the IR Rationale explicitly states, "WIC exists for one or more uses, and *a TMDL is required* for the specific WIC cited; however, LDEQ will investigate revising criteria due to the possibility that natural conditions may be the source of the water quality criteria impairments." (emphasis added)

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	26. TELC V.E: EPA does not recognize LDEQ's 5RC category; it is therefore impermissible. LDEQ's 5RC Category Is Unsupported and Does Not Describe the Criteria or Time Frame for Determining whether a Water Quality Impairment is Natural.	26. Use of IRC 5RC was agreed upon with EPA Region 6 during development of the 2010 Integrated Report. Many states use additional subcategories of the CALM guidance IR categories. The Clean Water Act does not require a specific timeline for TMDL development or determination of whether water quality impairments are natural. See also response to TELC comment 25.
	27. TELC VI: The Public Notice Rationale Contains Insufficient Information to Make Informed Comments and Denies Meaningful Public Participation. LDEQ's failure to list and explain each revision of a water body inhibits the ability of the public to understand and to comment on the validity of these changes. In the past, the LDEQ has provided a highlighted list with proposed changes. Why did the LDEQ not provide this highlighted list for public review?	27. LDEQ's public notice is based on fulfilling federal requirements of §303(d) of the Clean Water Act and contains all information or references to supporting documentation needed for review. There is no regulatory requirement in the Clean Water Act to provide a highlighted list of proposed changes to the 303(d) list (40 CFR § 130.7 et seq.). See also response to TELC comment 1.
	28. TELC VII: LDEQ Must Meet Its Constitutional Duties as Public Trustee and Steward of the Environment.	28. Please see all preceding responses to comments 1-27 regarding the 2010 IR.
Lake Pontchartrain Basin Foundation (LPBF) Received on 7/9/2010	1. LPBF believes that some portion, if not all, of Bayou Liberty has recently become a Scenic Stream.	1. LDEQ is aware of the recent Bayou Liberty change; however, we are not required to change our regulatory designated use status based on the LDWF Scenic Stream designation. If LDEQ elects to change the designated use in LAC 33:IX.1123. Table 3, such a change will take several months and, therefore, extend beyond the time frame necessary for completing the 2010 IR.
	2. Looking at LPBF data from Big Creek (a tributary of the Tangipahoa River), it appears as though the fecal coliforms do meet secondary contact recreation levels. Of the data below, 14 samples (or 19% of samples) were > 1000 MPN out of 73 total samples. We sampled Big Creek at Hwy 10 as part of our EPA Targeted Watershed grant and utilized the LELAP-approved Microbiology Lab at Southeastern Louisiana University for analyses.	2. LDEQ's ambient data for Big Creek, LA040703_00, was rechecked to confirm the initial 2010 assessment. This recheck showed impairment for both primary and secondary contact recreation. LDEQ will, therefore, continue to list the stream as impaired despite the findings of LPBF's data. This is done so because LDEQ reports the worst case scenario from any given dataset.